UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

UNITED STATES OF AMERICA) CRIMINAL NO. 180V 10154
v. (1) FRANCIS M. REYNOLDS (2) M. JAY HEROD, Defendants	 Violations: 15 U.S.C. §§ 78j(b), 78ff(a) and 17 C.F.R. § 240.10b-5 (Securities Fraud) 15 U.S.C. §§ 78(i)(a), 78ff(a) (Manipulative Trading) 18 U.S.C. § 981(a)(1)(C) and 28 U.S.C. § 2461(c)) (Asset Forfeiture)

INDICTMENT

THE GRAND JURY CHARGES THAT:

At all times relevant to this Indictment:

- 1. Defendant FRANK REYNOLDS was an individual who resided at times in Salem, New Hampshire, at times in Newton, Massachusetts and at times in Ft. Meyers, Florida. He was the President, Chief Executive Officer, Chief Financial Officer and Chief Science Officer of PixarBio, and the chair of its Board of Directors. REYNOLDS made all significant decisions for PixarBio, wrote the substance of the company's press releases and offering materials, and reviewed and approved the company's filings with the United States Securities and Exchange Commission (SEC).
- 2. Defendant M. JAY HEROD was a friend of REYNOLDS who resided in Cambridge, Massachusetts and was an investor in PixarBio.
- 3. Kenneth Stromsland was a former classmate of REYNOLDS who resided in Plainfield, New Jersey and was an investor in PixarBio. In December 2015, he joined PixarBio as Chief Information Officer. In July 2016, he was promoted to Vice President of Investor Relations.
- 4. PixarBio was a company, primarily headquartered in Medford, Massachusetts, that purported to be developing "NeuroRelease," a proprietary method of delivering a non-

opioid pain-killer, carbamazepine, to treat post-operative pain and other conditions. Between on or about October 31, 2016 and on or about January 23, 2017, PixarBio's shares traded on OTC Link, an over-the-counter securities market and instrumentality of interstate commerce, under the ticker symbol PXRB. Trading in PixarBio shares was temporarily suspended by the SEC from January 23, 2017 to February 2, 2017. From February 3, 2017 through the present, the shares were traded over-the-counter but are no longer listed on OTC Link.

5. Beginning in or about August 2013, in the District of Massachusetts and elsewhere, FRANK REYNOLDS, M. JAY HEROD and one or more others engaged in a scheme to defraud investors in PixarBio by, among other things, (1) making and causing to be made false and misleading statements about the company, its prospects, its financing and the background and track record of its chief executive officer, FRANK REYNOLDS, and (2) engaging in manipulative trading of PixarBio shares.

REYNOLDS SOLICITED INVESTORS IN PIXARBIO WITH FALSE AND MISLEADING CLAIMS

6. From at least in or about December 2015 until the present, REYNOLDS promoted investment in PixarBio by making, and causing PixarBio to make, false and misleading claims about the company's products, timelines to product approvals and commercial launches, financial status, financing, leadership team, and REYNOLDS' past, including personal, business and scientific successes and the reasons for his departure from his prior employment. Together, these false and misleading claims painted a picture of REYNOLDS as an extremely successful inventor and chief executive officer with a product that would end "thousands of years of morphine and opioid addiction" and provide investors with significant returns on their investments.

A. The December 2015 Investor Solicitation

- 7. In a December 2015 email and presentation to potential investors, REYNOLDS promised investors "a HUGE return on investment (ROI) for any investors in PixarBio's NeuroRelease." He told investors: "The value of our portfolio on Wall Street is soaring with excitement around our sales partnership. At only \$1,000,000,000 right now, as we prepare to replace morphine in the clinic in late 2017 or early 2018, and we expect our valuation to long-term trend UP." He added that the "[f]orecasted financials are conservative." In this email, REYNOLDS also told investors that his own Reynolds School of Business had developed "the cure for paralysis in humans."
- 8. Reynolds knew those statements were materially false and misleading. In fact, PixarBio had not finished the pre-clinical work required to apply for permission to conduct human trials, commenced manufacturing a product that could be used in humans, or started human clinical trials. It also never had a market value of one billion dollars.
- 9. PixarBio also did not have a product that could be expected to end "thousands of years of morphine and opiate addiction." In fact, NeuroRelease is not a treatment for opiate addiction at all. It is, instead, a potential additional means of delivering carbamazepine via injection, in a time-release form. Carbamazepine is already available on the market in other forms, including time-release pills.
- 10. With his email to potential investors, REYNOLDS enclosed a December 2015 presentation entitled "Novel Biomaterials for Neurological Delivery Systems Breakthrough Non-Opiate, Non Addictive Pain Treatment." The presentation stated:

Our September 30, 2015 meeting with the FDA [Food and Drug Administration] lowered our hurdles for FDA approval and we're ready to transfer three pain treatments to the clinic for knee, hip, and shoulder pain...

Live US FDA [] meeting on September 30, 2015 confirmed our IND [Investigational New Drug] package and discuss[ed] our pathway to clinical studies in 2017 and approvals in early 2018.

- 11. REYNOLDS knew those statements were materially false and misleading. In fact, PixarBio had not even submitted an Investigational New Drug ("IND") package—the package of materials that must be approved by the FDA before starting human clinical trials. Moreover, the FDA had made clear to PixarBio that the company had substantial work to do before it would be ready to submit such a package, and that the FDA did not see why the company's product would be clinically superior to products already on the market for certain indications. In short, the FDA did not "lower" any regulatory hurdles and did not "confirm" PixarBio's IND package.
- misleading claims about REYNOLDS' purported achievements. For example, the presentation stated that REYNOLDS had attended "years of graduate school with formal training in Neuroscience, providing the foundation for his neuroscience expertise." In fact, REYNOLDS had no formal training in neuroscience. Similarly, REYNOLDS contended that he was "lead inventor" on the "NeuroScaffold" offered by his prior employer, InVivo Therapeutics ("InVivo"), to treat acute spinal cord injuries. In fact, the NeuroScaffold was invented by a professor at the Massachusetts Institute of Technology ("MIT"), together with a neurosurgeon from Harvard Medical School. REYNOLDS also stated that he founded PixarBio after his "retirement" from InVivo. In fact, Reynolds resigned from InVivo because he expected to be fired the next day.

B. The Private Securities Offering and Form S-1

13. On or about August 22, 2016, REYNOLDS caused PixarBio to issue a press release announcing that a private securities offering underway at the time was

"oversubscribed," and that the maximum offering amount would be increased from \$20 million to \$30 million. In fact, as REYNOLDS knew, the offering was not fully subscribed and had not raised even \$10 million.

- 14. On or about October 20, 2016, REYNOLDS caused PixarBio to issue a press release announcing that the maximum offering amount would be increased from \$30 million to \$40 million. Once again, as REYNOLDS knew, the offering had not raised even \$10 million.
- 15. On or about November 7, 2016, REYNOLDS caused PixarBio to issue a press release stating that the private offering announced in August 2016 "closed \$7.2MM cash, \$16.2MM in warrants, and we closed a \$10MM line of credit to provide our runway with enough fuel through 2017." In fact, REYNOLDS knew that PixarBio did not have those funds actually closed and available, and had raised only about \$5 million in cash during that time period.
- 16. On November 25, 2016, PixarBio filed with the SEC a Form S-1 registration statement to register 78,529,976 shares of common stock that PixarBio had previously issued to investors. REYNOLDS signed the Form S-1 as PixarBio's chief executive officer.

17. The Form S-1 stated:

We participated in a face-to-face Pre-IND Meeting with the U.S. FDA on September 30, 2015 to discuss pre-clinical and clinical requirements of the NeuroRelease 14-day product, indicated for a nerve block development program. The meeting minutes capture the required pre-clinical elements to support the clinical program. As a result of this meeting, we expect that clinical trials will begin in late 2017 and US FDA approvals for the NeuroRelease 14-day product are expected in 2018.

18. REYNOLDS knew that those statements were materially false and misleading and that, given FDA requirements and necessary review time, it was not realistic that clinical trials could begin in late 2017 or that NeuroRelease would receive FDA approval in 2018.

C. Claims About Acquiring InVivo

- 19. On or about January 3, 2017, REYNOLDS caused PixarBio to issue a press release announcing a purported bid to acquire InVivo, REYNOLDS' former employer.
- 20. The press release, entitled "It's Time to Make US Pharma GREAT Again," announced that PixarBio was making a take-over bid to acquire InVivo. It stated: "PixarBio's \$77,000,000 Stock Offer Will Create a New Pharma Called Reynolds Therapeutics Corporation to Solve the Opiate Crisis and To Regenerate Chronic Spinal Cord in Humans and Finally Cure Paralysis." It also stated: "The deal is expected to close in Q1 2017."
- 21. In fact, REYNOLDS knew that PixarBio had not made any formal offer, did not have the capacity to offer \$77,000,000 to acquire InVivo, and had no reasonable expectation of doing so, let alone closing such a transaction in the first quarter of 2017. The press release once again falsely described REYNOLDS as the primary inventor and patent holder of NeuroScaffold.
- 22. On January 4, 2017, PixarBio issued a second press release, which it filed with the SEC attached to a Form 8-K that REYNOLDS signed in his capacity as the company's chief executive officer. The press release renewed the claim that REYNOLDS invented the NeuroScaffold and stated that PixarBio "will increase our offer for InVivo Therapeutics to \$100,000,000."
- 23. REYNOLDS knew that the statements in the January 4, 2017 press release and Form 8-K were materially false and misleading and that neither PixarBio nor REYNOLDS had the capacity to offer \$100 million to acquire InVivo.

MANIPULATION OF PRICE AND VOLUME OF PIXARBIO STOCK

- 24. Beginning in or about November 2016, and continuing until about January 23, 2017, HEROD and Stromsland, while in close communication with REYNOLDS, made manipulative trades in PixarBio stock that simulated market interest in the stock and artificially inflated the trading price. These trades included overlapping orders to buy and sell PixarBio stock at the same price per share (a manipulative trading practice sometimes referred to as "matched trading"), small purchases to boost the trading price submitted shortly before trading closed at 4:00 p.m. (a manipulative practice sometimes referred to as "marking the close"), and orders to buy at a price much higher than the price of the preceding market transaction.
- 25. For example, on November 11, 2016, the trading price of PixarBio stock fell from \$14 to \$10 per share. At 3:05 p.m., Stromsland called his broker and placed an order to buy 100 shares at \$14.25 per share. While still on the phone with his broker, Stromsland checked the OTC website and asked the broker, "How come . . . the last price still says \$10?" The broker explained that Stromsland's purchase had been marked out of sequence and did not affect the publicly quoted price of PixarBio stock. Stromsland said, "Yeah, but I need it to be in sequence" and "yeah, but that's not what I wanted . . . So anybody looking to buy this now just sees \$10 and doesn't know that it's \$14.25 is the last trade." He also asked: "Is there any way to fix it?"
- 26. Stromsland then called customer service at OTC Markets, the entity that runs OTC Link, but his purchase at \$14.25 per share still did not appear on OTC's public website. At 3:42 p.m., STROMSLAND called his broker again and said, "I need to buy 100 shares at \$14.25 of PXRB ... real quick [and] right now." Stromsland's second purchase of 100 shares at \$14.25 per share was executed at 3:55 p.m. The stock closed that day at \$14.50:

- 27. Stromsland and Reynolds exchanged at least eight phone calls on November 11,2016, including calls just before and after Stromsland's calls to his broker and OTC markets.
- 28. After trading closed at 4:00 p.m., Stromsland called REYNOLDS and they exchanged three calls before 4:30 p.m. At 4:40 p.m., REYNOLDS instructed PixarBio's controller that Stromsland was entitled to a \$27,500 "bonus".
- 29. On November 17, 2016 at 3:56 p.m., when the trading price of PixarBio was again down to \$10 per share, Stromsland bought 100 shares at \$12.50 per share.
- 30. On December 5, 2016, HEROD made three matched trades in which he placed orders to buy and sell 100 shares at the same time at the same price. In little more than one hour, his trades drove the price from \$5.44 per share to \$5.70 per share. On December 6, 2016, HEROD also made matched trades in which he bought and sold 100 shares at the same time at the same price and drove up the price of the stock from \$4.75 per share to \$5.65 per share.
- 31. On December 20, 2016, at three different points at time, as the share price fell close to \$4.00 per share, HEROD and Stromsland made purchases of PixarBio above the most recent price and thereby moved the stock price back up. For example, at 12:21:06 p.m., HEROD submitted an order to buy 100 shares at \$4.20 per share, even though he had sold 1,810 shares at \$4.06 per share three and a half minutes earlier. He thereby moved the price, which had been falling earlier in the day, back up from \$4.00 to \$4.20 per share. At 12:30:22 p.m., Stromsland bought 170 shares at \$4.09 per share, even though the most recent price was \$4.00 per share. At 12:58:34 p.m., HEROD purchased 100 shares at \$4.50 per share, which was at least 31 cents more than the most recent price.
- 32. On the afternoon of December 21, 2016, when the share price was at \$4.10 with less than ten minutes of trading before the market closed, HEROD placed an order to sell 630 shares at \$4.05 per share. Less than a minute later, HEROD placed an order for 100 shares at

\$5.00 a share. The 100 shares he purchased were among the 630 he had offered to sell minutes earlier. As a result of these nearly simultaneous buy and sell orders, the share price temporarily went up to \$5.00. Minutes later, when the stock dropped back to \$4.00 (the low of the day) in the three minutes before the market closed, HEROD again placed at least four buy orders, at prices ranging from \$5.00 to \$4.89, which resulted in the stock closing at \$4.89 per share.

- 33. On December 27, 2016, HEROD again made purchases of shares above the trading price. For example, at 11:08 a.m., when stock was trading at \$4.40 per share, Herod purchased 100 shares at \$4.99 per share, and thereby drove the price up to \$4.99. Later in the day, when price had dropped to \$4.50, and about one minute after he himself sold 100 shares at \$4.50, he placed an order to buy 100 shares at \$4.88 per share. The purchase order was filled with shares that he had offered to sell at \$4.88 shortly before.
- 34. On December 28, 2016, HEROD made similar trades where he was both the buyer and seller of the shares and which drove up the price.
- 35. Between October 31, 206 and January 23, 2017, HEROD sold 211,901 shares of PixarBio stock to the public. During that same time, HEROD also purchased a 6,618 shares, often at higher prices than his own pending orders to sell, as part of an effort to artificially inflate the reported price and trading volume of PixarBio's stock.
- 36. When HEROD sold 211,901 shares of PixarBio stock, as described in paragraph 35 above, he made a net profit of about \$877,488. HEROD provided \$500,000 of the proceeds from these sales of PixarBio stock to PixarBio itself, and received additional PixarBio shares. HEROD provided \$300,000 of the profits to REYNOLDS' spouse for the benefit of REYNOLDS, while keeping the remaining profits for himself.

COUNT ONE

(Securities Fraud: 15 U.S.C. §§ 78j(b) & 78ff(a), and 17 C.F.R. § 240.10b-5)

- 37. The Grand Jury realleges and incorporates herein by reference the allegations of paragraphs 1-36 and further charges that:
- 38. From in or about August 2013 until in or about April 2018, in the District of Massachusetts and elsewhere,
 - (1) FRANCIS M. REYNOLDS and
 - (2) M. JAY HEROD,

defendants herein, did knowingly and willfully, directly and indirectly, by the use of any means and instrumentality of interstate commerce and the mails use and employ manipulative and deceptive devices and contrivances in connection with the purchase and sale of any security in contravention of Rule 10b-5 (17 C.F.R. § 240.10b-5) of the Rules and Regulations promulgated by the Securities and Exchange Commission, by (a) employing a device, scheme and artifice to defraud; (b) making untrue statements of material facts and omitting to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; and (c) engaging in acts, practices and courses of business which would and did operate as a fraud and deceit, in connection with the purchase and sale of securities, to wit, the stock of PixarBio.

All in violation of Title 15, United States Code, Sections 78j(b) & 78ff(a); Title 17, Code of Federal Regulations, Section 240.10b-5 and 18 U.S.C. § 2.

COUNT TWO

(Securities Fraud: 15 U.S.C. §§78ff(a), 78i(a) – Manipulative Trading)

- 39. The Grand Jury realleges and incorporates herein by reference the allegations of paragraphs 1-36 and further charges that:
- 40. From in or about October 2016 until in or about January 2017, in the District of Massachusetts and elsewhere,
 - (1) FRANCIS M. REYNOLDS and
 - (2) M. JAY HEROD,

defendants herein, did knowingly and willfully, directly and indirectly, by the use of the mails and any means and instrumentalities of interstate commerce:

- (1) for the purpose of creating a false and misleading appearance of active trading in a security other than a government security, and a false and misleading appearance with respect to the market for any such security, to wit, the stock of PixarBio, enter an order and orders for the purchase of such security with the knowledge that an order and orders of substantially the same size, at substantially the same time, and at substantially the same price, for the sale of any such security, had been and would be entered by and for the same and different parties, and
- (2) to effect, alone and with one and more persons, a series of transactions in a security, to wit, the stock of PixarBio, creating actual and apparent active trading in such security and raising and depressing the price of such security, for the purpose of inducing the purchase and sale of such security by others.

All in violation of 15 U.S.C. Sections 78i(a) & 78ff(a) and 18 U.S.C. Section 2.

CRIMINAL FORFEITURE ALLEGATION (18 U.S.C. § 981(a)(1)(C) & 28 U.S.C. § 2461(c))

41. Upon conviction of one or more of the offenses set forth in Counts One and Two of this Indictment,

(1) FRANCIS M. REYNOLDS and

(2) M. JAY HEROD,

defendants herein, shall forfeit to the United States, pursuant to Title 18, United States Code, Section 981(a)(1)(C) and Title 28, United States Code, Section 2461(c), any property, real or personal, which constitutes or is derived from proceeds traceable to the commission of such offenses.

- 42. If any of the property described in Paragraph 41 as being forfeitable pursuant to Title 18, United States Code, Section 981(a)(1)(C) and Title 28, United States Code, Section 2461(c), as a result of any act or omission by the defendants -
 - a. cannot be located upon the exercise of due diligence;
 - b. has been transferred or sold to, or deposited with, a third party;
 - c. has been placed beyond the jurisdiction of this Court;
 - d. has been substantially diminished in value; or
 - e. has been commingled with other property which cannot be divided without difficulty,

it is the intention of the United States, pursuant to Title18, United States Code, Section 982(b) and Title 28, United States Code, Section 2461(c), incorporating Title 21, United States Code, Section 853(p), to seek forfeiture of all other property of the defendants up to the value of the property described in paragraph 41 above.

All pursuant to Title 18, United States Code, Section 981(a)(1)(C) and Title 28, United States Code, Section 2461(c).

A TRUE BILL

SARA MIRON BLOOM Assistant U.S. Attorney

DISTRICT OF MASSACHUSETTS, May 22, 2018

Returned into the District Court by the Grand Jury Foreperson and filed.

DEPUTY CLERK

1:50 g.m. 5/22/14